

WHAT IS CLAIMED IS:

1. An electro-optical device, comprising:
  - a substrate;
  - a data line;
  - a scanning line extending in a direction crossing the data line;
  - a first switching element to which a scanning signal is applied by the scanning line; and
  - a pixel electrode to which an image signal is applied, by the data line, via the first switching element,
  - the substrate having an image display region defined as a region to form the pixel electrode and the first switching element, and a peripheral region to define the surrounding area of the image display region,
  - the peripheral region has a second switching element to determine whether the image signal will be applied to the data line, and a light shielding film which is formed with the second switching element and the interlayer insulating film therebetween, and
  - the light shielding film overlaps at least a portion of the second switching element in plan view.
2. An electro-optical device, comprising:
  - a substrate;
  - a data line;
  - a scanning line extending in a direction crossing the data line;
  - a first switching element to which a scanning signal is applied by the scanning line; and
  - a pixel electrode to which an image signal is applied, by the data line, via the first switching element,
  - wherein the substrate has an image display region defined as a region for forming the pixel electrode and the first switching element, and a peripheral region for defining the surrounding area of the image display region,
  - the peripheral region has a second switching element for determining whether the scanning signal will be applied to the scanning line, and a light shielding film which is formed with the second switching element and the interlayer insulating film therebetween, and
  - the light shielding film overlaps at least a portion of the second switching element in plan view.

3. The electro-optical device according to Claim 1,  
the second switching element having a laminated structure of a semiconductor layer, an insulating film, and an electrode film, and  
the light shielding film overlapping at least a portion of the electrode film in plan view.
4. The electro-optical device according to Claim 3,  
the semiconductor layer having a channel region, and a source region and a drain region with the channel region therebetween,  
the electrode film being formed in a portion corresponding to the channel region, and  
the light shielding film being formed in portions corresponding to the source region and the drain region but is not formed in a portion corresponding to the channel region.
5. The electro-optical device according to Claim 3,  
the light shielding film and the electrode film being rectangular in plan view, and  
the light shielding film overlapping the electrode film in the long side of a rectangle in plan view.
6. The electro-optical device according to Claim 1,  
the second switching element being formed at the same time as the forming of the first switching element of the electro-optical device.
7. The electro-optical device according to Claim 1,  
the light shielding film overlapping at least a portion of the first switching element.
8. The electro-optical device according to Claim 1,  
the light shielding film being made of light shielding material.
9. The electro-optical device according to Claim 1, further comprising:  
a pixel-division light shielding film which is formed to correspond to the data line and the scanning line in the image display region, and  
the light shielding film being formed at the same time as the forming of the pixel-division light shielding film in the manufacturing step of the electro-optical device.
10. The electro-optical device according to Claim 1,  
the distance between the light shielding film and the second switching element being 3000 [nm] or less.
11. An electronic apparatus, comprising:

the electro-optical device according to Claim 1.